

Device Information



ICL232

+5V Powered, Dual RS-232 Transmitter/Receiver

 Datasheet & Related Docs	 Description	 Key Features	 Parametric Data	 Related Devices
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Ordering Information

 RoHS/Pb-Free/Green Device

Part No.	Status	Temp.	Package
ICL232CBE	Active	Comm	16 Ld SOIC
ICL232CBET	Active	Comm	16 Ld SOIC T+R
ICL232CBEZ 	Active	Comm	16 Ld SOIC
ICL232CBEZT 	Active	Comm	16 Ld SOIC T+R
ICL232CPE	Active	Comm	16 Ld PDIP
ICL232IBE	Active	Ind	16 Ld SOIC
ICL232IBET	Active	Ind	16 Ld SOIC T+R
ICL232IPE	Active	Ind	16 Ld PDIP
ICL232MJE	Active	Mil	16 Ld CerDIP

The price listed is the manufacturer's suggested retail price for quantities between 100 and 999 units. However, prices in today's market are fluid and may change without notice.

MSL = Moisture Sensitivity Level - per IPC/JEDEC J-STD-020

SMD = Standard Microcircuit Drawing

Description

The ICL232 is a dual RS-232 transmitter/receiver interface circuit that meets all EIA RS-232C and V.28 specifications. It requires a single +5V power supply, and features two onboard charge pump voltage converters which generate +10V and -10V supplies from the 5V supply.

The drivers feature true TTL/CMOS input compatibility, slewrate-limited output, and 300Ω power-off source impedance. The receivers can handle up to +30V, and have a 3kΩ to 7kΩ input impedance. The receivers also have hysteresis to improve noise rejection.

Key Features

- Meets All RS-232C and V.28 Specifications
- Requires Only Single +5V Power Supply
- Onboard Voltage Doubler/Inverter
- Low Power Consumption
- 2 Drivers
 - $\pm 9V$ Output Swing for +5V Input
 - 300Ω Power-off Source Impedance
 - Output Current Limiting
 - TTL/CMOS Compatible
 - $30V/\mu s$ Maximum Slew Rate
- 2 Receivers
 - $\pm 30V$ Input Voltage Range
 - $3k\Omega$ to $7k\Omega$ Input Impedance
 - 0.5V Hysteresis to Improve Noise Rejection
- All Critical Parameters are Guaranteed Over the Entire Commercial, Industrial and Military Temperature Ranges
- Pb-Free Plus Anneal Available (RoHS Compliant)

Related Documentation

- DS** Datasheet(s):
- [+5V Powered, Dual RS-232 Transmitter/Receiver](#)

- TH** Technical Homepage:
- [Interface Ics](#)
 - [RS-232 Interface Ics](#)

PT Parametric Data

# of Tx	2
# of Rx	2
High ESD	No
Manual Shutdown	No
Auto Shutdown	No
Rx Disable	No
Data Rate (kbps)	120
Cap. Value (μF)	1
I_{CC} Enabled (mA)	5
I_{CC} Disabled (μA)	N/A
V_{CC} Range (+V)	4.5 to 5.5

Applications

- Any System Requiring RS-232 Communications Port
 - Computer - Portable and Mainframe
 - Peripheral - Printers and Terminals
 - Portable Instrumentation
 - Modems
- Dataloggers

Related Devices

PT [Parametric Table](#)

HIN202	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN206	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN207	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN208	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN211	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN213	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
HIN232	+5V Powered RS-232 Transmitters/Receivers
HIN236	+5V Powered RS-232 Transmitters/Receivers
HIN237	+5V Powered RS-232 Transmitters/Receivers
HIN238	+5V Powered RS-232 Transmitters/Receivers
HIN239	+5V Powered RS-232 Transmitters/Receivers
HIN240	+5V Powered RS-232 Transmitters/Receivers
HIN241	+5V Powered RS-232 Transmitters/Receivers